

# Postpartum Phlebectomy

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USUALLY VARICES that develop or enlarge during pregnancy diminish in size after parturition. However, the veins will not return to a normal state if irreversible anatomic changes have taken place. With passage of time varices become larger and more troublesome.<sup>7</sup>

Since patients operated upon for varicose veins spend about the same length of time in hospitals as do postpartum patients, and also about the same time at home in convalescence, it seemed logical to consider carrying out surgical treatment of varicosities in the immediate postpartum period, thus making one stay in hospital serve two purposes.

We performed saphenous ligation and stripping on 27 patients in the immediate postpartum period without postoperative complications. The patients varied from 22 to 39 years of age and had two to six children each; 22 of the patients had three or more children. Fifteen of the 27 patients had a definite familial history of varices. Seven patients had noticed one or more prominent varicose veins while they were in their late teens, before they ever became pregnant. Of the 20 patients who noticed varices only after pregnancy, five did not observe any until the second or third pregnancy. The varices were bilateral in 16 patients, limited to the left leg in eight, and to the right leg in three.

## INDICATIONS FOR OPERATION

In general, indications for surgical treatment of varicosities are the same for pregnant patients as for any patient. A special indication is a history of significant or troublesome varices between pregnancies. If the last previous delivery was anything other than normal and uncomplicated, that should be considered a contraindication. We believe the operation should be done at the time of the last planned pregnancy, since pregnancy seems to dispose toward development of new varices. Of three patients in the present series who became pregnant again after operation, two had new varices develop.

All patients are carefully evaluated during pregnancy, and the usual diagnostic tests are per-

• Saphenous vein ligation and stripping was performed on 27 patients in the immediate postpartum period without complications. Doing the operation at this time saves time and money. Technically it is easier to do postpartum than during pregnancy, and the patients have less postoperative discomfort than is usual with phlebectomy at other times.

formed.<sup>4,5</sup> However, a history and visual examination give most of the necessary information. All the patients in the series had incompetency of both the greater saphenous vein and the perforator veins. In many cases the incompetency of the perforator vein was the more pronounced. In only three patients was incompetency sufficient to warrant operation of the lesser saphenous system.

## Time of Operation

As soon as feasible after delivery, we are notified by the obstetrician. The patient is then reevaluated, and if operation is mutually agreeable it is performed on the second postpartum day when possible, but holidays, weekends and surgical schedules sometimes interfere with this. No complications occurred that were attributable to elective operation so soon postpartum.

## Technique

The authors cannot improve upon the excellent detailed description of surgical technique for varicose vein operations given by Homans<sup>3</sup> in 1916, and Myers<sup>5</sup> in 1955. However, several points bear stressing. Spinal anesthesia was used in 15 cases, and general anesthesia in 12. Our anesthesiologists are not hesitant about repeating a spinal anesthetic if both they and the patient so desire. After dissection and ligation of veins in the fossa ovalis, an intraluminal stripper is inserted in the greater saphenous vein from ankle to groin and is allowed to remain in place while the dissection and ligation of the tributaries and perforators, which have been carefully marked out before operation, are completed. Much of this dissection is done with the Mayo extraluminal strippers. All incisions are meticulously approximated after it is ascertained that the wounds are dry. The legs are elevated as high as possible and massaged free of venous blood, then the intraluminal stripper is pulled through to the groin.

Presented before the Section on General Surgery at the 89th Annual Session of the California Medical Association, Los Angeles, February 21 to 24, 1960.

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Excess blood is expressed from the extremity, and then the groin incision, which has been partially approximated, is completely closed. If the removed vein is intact, this completes the operation; otherwise a meticulous search must be carried out to insure complete removal of the greater saphenous venous system. A compression bandage consisting of abdominal pads and wide (4 or 5 inches) Ace bandages is then applied from toes to groin.

The operations took from 80 to 108 minutes in the present series of cases. Recently we have shortened the time in cases of bilateral varicosities by operating on both legs simultaneously.

#### Postoperative Care

The patient's legs are kept elevated at as steep an angle as is comfortable for her. Early ambulation is encouraged but kept at a minimum during the first few postoperative days, since ambulation if done too enthusiastically leads to excessive edema and bleeding. When the patient is ready to leave the hospital, the large pads are removed from the legs, but the Ace bandages are reapplied.

Antibiotics are not used routinely postoperatively. Most of our patients go home on the second or third postoperative day. Those who stay longer do so for their own convenience rather than because of complications.

The total stay in hospital was four to six days in 20 cases and seven to eleven days in seven cases, including labor, delivery, operation and postoperative days. Several of the patients had been put in hospital several days before delivery because of potential obstetrical complications.

#### RESULTS

The patients have been enthusiastic about combining delivery and operation, not only because of the saving in time and money but also because they seem to have less postoperative discomfort than the average patient after varicose vein operations. Fifteen of the patients had not had sclerosing injections,

nine patients had had two or three injections, and three patients had had to have many. The results of operation were good to excellent in 23 patients and fair in two. The other two had significant new varices that developed when they became pregnant again.

#### DISCUSSION

In recent years some investigators have enthusiastically recommended surgical treatment of varices during pregnancy.<sup>1,7,8</sup> While the relief of symptoms thus obtained by patients incapacitated by varices during pregnancy is gratifying, it seems to us that it is only the rare patient who cannot be managed through this period by nonoperative means. And we agree wholeheartedly with Greenstone<sup>5</sup> and associates, who caution against phlebectomy during pregnancy for any but the exceptional patient. Rather than subject a pregnant woman to operation for varicose veins, we offer the alternative of doing the operation immediately postpartum.

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